

In the claims

22(Previously Amended). A speaker verification method comprising the steps of:

(a) generating a code book covering a plurality of speakers having a plurality of training utterances for each of the plurality of speakers, wherein a first utterance of the plurality of training utterances is not the same as a second utterance of the plurality of training utterances;

(b) receiving a plurality of test utterances from one of the plurality of speakers, wherein a first of the plurality of test utterances is not the same as a second of the plurality of test utterances;

(c) comparing each of the plurality of test utterances to each of the plurality of training utterances for the speaker to form a plurality of preliminary decisions, one preliminary decision of the plurality of preliminary decisions for each of the plurality of test utterances, wherein the one preliminary decision is either a true or a false decision; and

(d) combining the plurality of preliminary decisions to form a verification decision.

23(Original). The method of claim 22, wherein step (d) further includes the steps of:

(d1) weighting each of the plurality of preliminary decisions.

24(Original). The method of claim 23, wherein the step of weighting includes determining a historical probability of false alarm for each of the plurality of utterances.

25(Original). The method of claim 23, wherein the step of weighting includes evaluating a quality of the preliminary decision for each of the plurality of decisions.

26(Original). The method of claim 22, wherein step (a) further includes the steps of:

(a1) separating the plurality of speakers into a male group and a female group;

(a2) determining a male variance vector from the male group;

(a3) determining a female variance vector from the female group.

27(Original) The method of claim 26, wherein step (b) further includes the step of:

(b1) determining if the speaker is a male.

28(Original). The method of claim 27, wherein step (c) further includes the steps of:

(c1) when the speaker is male using the male variance vector to determine a weighted Euclidean distance between each of the plurality of test utterances and the plurality of training utterances.

29(Original) A method of speaker verification, comprising the steps:

- (a) receiving a plurality of test utterances from a speaker;
- (b) determining if the speaker is a male;
- (c) when the speaker is male, using a male variance vector to determine a weighted Euclidean distance between each of the plurality of test utterances and the plurality of training utterances;
- (d) forming a preliminary decision for each of the plurality of test utterances to form a plurality of preliminary decisions;
- (e) combining the plurality of preliminary decisions to from a verification decision.

30(Original). The method of claim 29, further including the steps of:

- (f) when the speaker is not male, using a female variance vector to determine a weighted Euclidean distance between each of the plurality of test utterances and the plurality of training utterances;
- (d) forming a preliminary decision for each of the plurality of test utterances to form a plurality of preliminary decisions;
- (e) combining the plurality of preliminary decisions to from a verification decision.

31(Previously Amended). A speaker verification method comprising the steps of:

- (a) receiving a plurality of different test utterances from a speaker;
- (b) comparing the plurality of different test utterances to a plurality of training utterance for the speaker to form a plurality of preliminary decisions, one preliminary decision for each of the plurality of different test utterances;
- (c) combining the plurality of preliminary decisions to form a verification decision.